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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/581,221

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Scott E. Hall

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

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EXAMINER

CHIN, RANDALL E

ART UNIT

PAPER NUMBER

3723

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/581,221	<b>Applicant(s)</b> HALL ET AL.	
	<b>Examiner</b> Randall Chin	<b>Art Unit</b> 3723	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5,7,8,10 and 13-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,7,8,10 and 13-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                        |                                                                   |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>07192010</u> .                                                | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Specification*

1. The substitute specification filed 22 September 2010 (marked-up copy) and 26 October 2010 (clean copy) have been approved and entered.

### *Drawings*

2. The drawings are objected to because in Fig. 5, it appears reference numeral 32 (i.e., the **leftmost numeral 32** in the figure) should instead be **34**.

Additionally, in the additional new drawings of Figs. 7 and 8, the disclosure of the **relative difference in sizes/lengths** of the wing portions (i.e., as shown in Figs. 7 and 8) constitutes new matter. There appears to be no original support for that shown by **both** Figs. 7 and 8.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the paddle members being "sufficiently different in configuration" as recited in claim 14 must be shown or the feature(s) canceled from the claim(s). **No new matter should be entered.**

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

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the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 14, the recitation that the paddle members are “sufficiently different in configuration” contradicts and renders indefinite that set forth back in claim 8, lines 4-5, reciting that the paddle members are substantially equal in configuration.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-5 and 7 are under 35 U.S.C. 103(a) as being unpatentable over Adamsson 2,312,828 (hereinafter Adamsson) in view of Urbush 3,316,576 (hereinafter Urbush).

As for claim 1, the patent to Adamsson discloses in Figs. 1-5 a rimmed brushhead comprising a brushhead member 11, which includes a bristle field 12 or 13, adapted for cleaning teeth, and a ridge or rim member 16 extending around at least a substantial portion of the bristle field of the brushhead, the rim member 16 having an upper edge which is lower than the top of the bristles (Figs. 1-5) and has a height which is deemed to be "substantially" (a broad term here rendering the entire recitation regarding the height of the rim member broader) one-half the height of the tallest bristles in the bristle field as best shown in Figs. 2-5 (by clear and apparent visual view) since the "rim member" 16 **can also include here the outer peripheral wall height of the brushhead 11 as well (note, Merriam Webster's Collegiate Dictionary, Tenth Edition defines "rim" as the outer often curved or circular edge or border of something)**, "and otherwise configured and arranged to produce movement of fluid from the bristles toward the teeth during operation of the toothbrush" (at least to an extent; merely functional). The patent to Adamsson discloses all of the recited subject matter as set forth above with the exception of the brushhead being as part of a power toothbrush, wherein the brushhead member in operation moves in a reciprocating action. The patent to Urbush teaches a brushhead 18 for a power toothbrush 10 wherein the brushhead member in operation moves in a reciprocating action (col. 2, lines 33-48). It would have been obvious to one of ordinary skill in the art to have provided Adamsson's brushhead with an arrangement such that it is part of a power toothbrush, wherein the brushhead member in operation moves in a reciprocating action

as suggested by Urbush for the purpose of providing automatic operation of the toothbrush and therefore improve brushing efficiency.

As for claim 2, the rim member is substantially continuous around the bristle field (Figs. 2-5; p. 2, col. 1, lines 15-21).

As for claim 3, there is a difference in flexibility between the rim member and the bristles in the bristle field, resulting in differential motion between the bristles and the rim member and a pumping action for the fluid toward the teeth.

As for claim 4, the rim member is deemed “separate” (at least in terms of spacing; a broad term here) from the brushhead member.

As for claim 5, the rim member is integral with the brushhead member.

As for claim 7, the recitation “substantially all of the fluid moving off the bristles is directed toward the teeth and gums of a user” is merely functional in form adding no further structural limitations to the claim(s).

8. Claims 8, 10 and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calabrese 2002/0124337 (hereinafter Calabrese) in view of Shipp 5,604,951 (hereinafter Shipp).

As for claim 8, Calabrese discloses in Figs. 1b, 2, 4 and 7 (more particularly, Fig. 4), for example, a brushhead member 2 “for a power toothbrush” (not a positive limitation), which includes a bristle field 3, adapted for cleaning teeth as part of a power toothbrush, “wherein the brushhead member in operation moves in a reciprocating action” (not a positive limitation; see preamble language), at least two paddle members

4 positioned on the brushhead member (Fig. 4), the paddle members each being continuous, substantially equal in size and configuration, the paddle members extending upwardly from a bristle base with the bristles 3, wherein the paddle members are not as high as the bristle field (Fig. 7), and “otherwise configured and arranged to produce movement of fluid from the bristles toward the teeth during operation of the toothbrush” (at least to an extent; merely functional). Calabrese discloses all of the recited subject matter as set forth above with the exception of the paddle members extending for substantially the entire length of the bristle field and wherein the bristle field extends entirely around the paddle members. The patent to Shipp discloses in Figs. 1-3 a prophy or paddle member device 18 extending for substantially the entire length of the bristle field (i.e., at least to the extent that the paddle member can extend for substantially the entire length of the bristle field **and at the same time** be surrounded entirely by bristles in the same sense as in Applicant’s invention) and wherein the bristle field 26, 28, 30 extends entirely around the paddle member 18. It would have been obvious to one of ordinary skill in the art to have modified Calabrese’s brushhead such that the paddle members extend for substantially the entire length of the bristle field and wherein the bristle field extends entirely around the paddle members as taught by Shipp for increasing the polishing surface and brushing area for improved brushing and polishing efficiency. It will be further added that Shipp, at least suggests to one of ordinary skill, that the rectangular prophy wall or device could well be duplicated (i.e., provide for at least more than one) such that there can be more than one of these prophy elements 18 for the Fig. 1 embodiment for the purpose of increasing the surface



area contacting teeth (col. 4, lines 1-10). A mere duplication of parts is deemed well within the level of ordinary skill for increasing the surface area contacting teeth.

As for claim 10, in Calabrese, the paddle members 4 extend substantially longitudinally of the brushhead (Fig. 4).

As for claim 13, in Calabrese, the paddle members are still deemed parallel (Fig. 4).

As well as claim 14 is understood, the paddle members 4 are deemed sufficiently different in "configuration" (i.e., at least with respect to the bristle members or in the sense that they are differently "configured" by being simply physically spaced from each other) that they can move out of phase with each other during movement of the brushhead 2.

As for claim 15, the paddle members 6 clearly have a different flexibility from the bristles (paragraphs [0024], [0025] and [0033]).

As for claim 16, in Calabrese, there are wing portions (not explicitly labeled but still clearly shown in Fig. 9) formed by ridge 7 which extend outwardly from the paddle members along the length thereof (Fig. 9; paragraph [0055]).

As for claim 17, in Calabrese, there are also wing portions at opposing ends of the paddle members (Fig. 9; paragraph [0055]).

9. Claims 8, 10 and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gavney, Jr. et al. 7,181,799 (hereinafter Gavney, Jr.) in view of Calabrese et al. 2002/0124337 (hereinafter Calabrese).

As for claim 8, Gavney, Jr. discloses in the Fig. 3A embodiment, for example, a base structure or brushhead member 301 “for a power toothbrush” (not a positive limitation), which includes a bristle field 315, 315’, 316, 316’, adapted for cleaning teeth as part of a power toothbrush, “wherein the brushhead member in operation moves in a reciprocating action” (not a positive limitation; see preamble language), at least two squeegee or paddle members 309 positioned on the brushhead member 301, the paddle members 309 each being continuous, “substantially” (a broad term) equal in size and configuration, the paddle members 309 extending upwardly from a bristle base with the bristles, and “otherwise configured and arranged to produce movement of fluid from the bristles toward the teeth during operation of the toothbrush” (at least to an extent; merely functional). Gavney, Jr. discloses all of the recited subject matter as set forth above with the exception of the paddle members being not as high as the bristle field. The patent to Calabrese discloses in Fig. 7, for example, a wall-like member or paddle member 4 which is not as high as a bristle field 3 . It would have been obvious to one of ordinary skill in the art to have modified Gavney, Jr.’s brushhead such that the paddle member is not as high as a bristle field as suggested by Calabrese in order to ensure and/or increase the bristle brushing surface area contact with the teeth.

As for claim 10, the paddle members 309 extend substantially longitudinally of the brushhead 301.

As for claim 13, the paddle members 309 are deemed parallel.

As well as claim 14 is understood, the paddle members 309 are deemed sufficiently different in configuration (Fig. 3A) that they can move out of phase with each other during movement of the brushhead 301.

As for claim 15, the paddle members 309 clearly have a different flexibility from the bristles 315', 315, 316', 316.

As for claims 16 and 17, Gavney, Jr. discloses all of the recited subject matter as set forth above with the exception of wing portions (not explicitly labeled but still clearly shown in Fig. 9) extending outwardly from the paddle members along the length thereof and at opposing ends of the paddle member members. The patent to Calabrese discloses in Fig. 9 a wall-like member or paddle 4 with wing portions formed by ridge 7 which extend outwardly from the paddle member along the length thereof and also wing portions at opposing ends of the paddle members also formed by ridge 7 (paragraph [0055]). It would have been obvious to one of ordinary skill in the art to have provided the Gavney, Jr. brushhead with wing portions extending outwardly from the paddle members along the length thereof and at opposing ends of the paddle member members as taught by Calabrese for the purpose of enhancing the polishing and/or abrasion capabilities of the brushhead.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to Kittle and Roberts are pertinent to brushes with paddle member arrangements.

11. Applicant's arguments with respect to claims 1-5, 7, 8, 10 and 13-17 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's argument with respect to the height of Adamsson's "rim member" is deemed adequately addressed and explained by the above art rejection to Adamsson and Urbush.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randall Chin whose telephone number is (571) 272-

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1270. The examiner can normally be reached on Monday through Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on (571) 272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Randall Chin/  
Primary Examiner, Art Unit 3723

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